

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 37 (Canceled)

38. (New) A telecommunications network providing non-dedicated circuit pathways between access nodes and switches in the network comprising:

a plurality of access nodes disposed about a service area of the telecommunications network;

a switch pool adapted to communicate with the access nodes in order to provide access by a plurality of user terminals to services of the telecommunications network;

at least two media gateways providing one or more connections between the access nodes and the switch pool via a plurality of circuit pathways; and

a media gateway selection node operably coupled to the media gateways and the switch pool, the media gateway selection node configured for:

selecting a media gateway;

allocating a circuit pathway between a switch and a target access node, wherein said allocating step comprises:

allocating a non-dedicated circuit pathway between the switch and the selected media gateway;

allocating a non-dedicated circuit pathway between the selected media gateway and the target access node.

39. (New) The network of claim 38, wherein the switches comprise Mobile Switching Centers (MSCS).

40. (New) The network of claim 38, wherein the access nodes comprise Base Station Controllers (BSCS).

41. (New) The network of claim 38, wherein the access nodes comprise Radio Network Servers (RNSs).

42. (New) The network of claim 38, wherein the gateway selection node further comprises a data structure defining relationships among gateways, access nodes, and identity codes associated with the circuit pathways.

43. (New) The network of claim 38, wherein the data structure comprises a media gateway selection database.

44. (New) The network of claim 38, wherein the identity codes comprise Circuit Identity Codes (CICS).

45. (New) A method of providing non-dedicated circuit pathways between access nodes and switches in a telecommunications network having a plurality of media gateways operably connected to a media gateway selection node, the method comprising the steps of:

- selecting a media gateway;

- allocating, by the media gateway selection node, a circuit pathway between a switch and a target access node, wherein said allocating step comprises:

- allocating a non-dedicated circuit pathway between the switch and the selected media gateway;

- allocating a non-dedicated circuit pathway between the selected media gateway and the target access node; and

- subsequently, de-allocating the circuit pathway between the switch and selected media gateway; and

- de-allocating the circuit pathway between the selected media gateway and the target access node.

46. (New) The network of claim 45, wherein the steps of selecting, allocating, and de-allocating are performed dynamically.

47. (New) The method of claim 45, further comprising the step of maintaining a media gateway selection node for selecting, allocating, and de-allocating circuit pathways.

48. (New) The method of claim 47, further comprising the step of maintaining a switch pool comprising the switches of the telecommunications network, the switch pool operably connected to the media gateway selection node.

49. (New) The method of claim 45, further comprising the step of maintaining a data structure defining relationships among gateways, access nodes, switches, and identity codes.

50. (New) A media gateway selection node for use in a telecommunications network for providing non-dedicated circuit pathways between access nodes and switches of a switch pool in the network, comprising:

means for storing and accessing data concerning media gateways, access nodes, switches, and circuit pathways of the network;

means for defining relationships among the media gateways, access nodes, switches, and circuit pathways; and

means for reserving and releasing circuit pathways as needed for use between individual switches and individual access nodes, wherein the means for reserving and releasing the circuit pathways is configured for:

selecting a media gateway;

allocating a circuit pathway between a switch and a target access node, wherein said allocating step comprises:

allocating a non-dedicated circuit pathway between the switch and the selected media gateway;

allocating a non-dedicated circuit pathway between the selected media gateway and the target access node; and

subsequently de-allocating each allocated circuit pathway between the switch and the target access node.

51. (New) A media gateway selection node according to claim 50, wherein the data concerning media gateways, access nodes, switches, and circuit pathways, further comprises load carrying capacity.

52. (New) A media gateway selection node according to claim 50, wherein the means for defining relationships among the media gateways, access nodes, switches, and circuit pathways is adapted to perform dynamically.

53. (New) A media gateway selection node according to claim 50, wherein the means for reserving and releasing circuit pathways as needed for use between individual switches and individual access nodes is adapted to perform dynamically.

54. (New) A method for dynamic allocation of a circuit pathway between a requesting switch, the requesting switch being one of a pool of switches, and an access node via a media gateway (MGW), comprising the steps of:

contacting a media gateway selection node (MGWSN) requesting a circuit connection to a target access node;

consulting a Media Gateway Selection Database (MGWSDB) to determine an available circuit pathway between the requesting switch and the target access node, wherein the circuit pathway is identified in the MGWSDB by a Circuit Identity Code (CID);

selecting one media gateway from among a plurality of media gateways;

reserving the CIC associated with a selected circuit pathway at the one media gateway; and

sending the identity of the MGW and the CIC to the requesting switch.

55. (New) A node in a telecommunication network for dynamic allocation of a circuit pathway between a requesting switch, and a target access node via a media gateway, the node comprising:

a media gateway selection node (MGWSN) for selecting a circuit pathway between the requesting switch and the target access node, wherein the MGWSN further comprises means for notifying the requesting switch of the selection and means for reserving the selection with a selected media gateway, wherein the circuit pathway includes:

the requesting switch, the requesting switch being one of a pool of switches;

the target access node, the target access node being one of a group of access nodes; and

the media gateway, being one of a plurality of gateways; and

a media gateway database (MGWSDB) coupled with the MGWSN, for storing circuit identity codes (CIC) necessary to control the allocation of circuit pathways by the MGWSN.